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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,270	01/31/2002	Keith W. Holt	01-869	4428

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EXAMINER

TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,270

Applicant(s)

HOLT, KEITH W.

Examiner

Joseph D. Torres

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10,11,13,23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10,11,13,23 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. In view of the amendment filed 06/26/2006, the Examiner withdraws all 35 USC § 112 rejections of the claims.

Response to Arguments

2. Applicant's arguments filed 06/26/2006 have been fully considered but they are not persuasive.

The Applicant contends, "none of the references cited by the Patent Office against the present invention, either alone or in combination, teach, disclose or suggest the above-referenced elements as claimed in Claims 1 and 23 of the present application and therefore, the above-cited references do not preclude patentability of the present invention" referring to "the error detection and correction code metadata and the generated error detection and correction code allow for verification of data path integrity at a byte level and detection of drive anomalies at a byte level".

The Examiner disagrees and asserts that Idleman teaches the error detection and correction code P and Q metadata and the generated error detection and correction P and Q code allow for verification of data path integrity at a byte level (col. 3, lines 65-68 in Idleman; col. 20, lines 26-30 in Idleman teach that when d_n is used to refer to data it refers to a byte of data at time; col. 18, lines 35-42 in Idleman teach that P and Q

Art Unit: 2133

metadata is generated on byte at a time and col. 18, lines 58-68 in Idleman teach that syndromes for both error detection and correction are generated one byte at a time) and detection of drive anomalies (col. 5, lines 41-46 in teach that P and Q metadata is used for monitoring operation functions for anomalies) at a byte level (col. 20, lines 26-30 in Idleman teach that when d_n is used to refer to data it refers to a byte of data at time; col. 18, lines 35-42 in Idleman teach that P and Q metadata is generated on byte at a time and col. 18, lines 58-68 in Idleman teach that syndromes for both error detection and correction are generated one byte at a time).

The Examiner disagrees with the applicant and maintains all rejections of claims 1, 3-8, 10, 11, 13, 23 and 25-28. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1, 3-8, 10, 11, 13, 23 and 25-28 are not patentably distinct or non-obvious over the prior art of record in view of the references, Idleman; Thomas E. et al. (US 5274645 A, hereafter referred to as Idleman) and Weng; Lih-Jyh (US 5265104 A) in view of Iwatani; Sawao (US 6023780 A) as applied in the last office action, filed 03/27/2006. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1, 3-8, 10, 13, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Idleman; Thomas E. et al. (US 5274645 A, hereafter referred to as Idleman) in view of Weng; Lih-Jyh (US 5265104 A).

See the Non-Final Action filed 03/27/2006 for detailed action of prior rejections.

4. Claims 11 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Idleman; Thomas E. et al. (US 5274645 A, hereafter referred to as Idleman) and Weng; Lih-Jyh (US 5265104 A) in view of Iwatani; Sawao (US 6023780 A).

See the Non-Final Action filed 03/27/2006 for detailed action of prior rejections.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2133

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2133

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOSEPH TORRES
PRIMARY EXAMINER

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133